REMARKS

Claims 10-14 are amended without the addition of new matter. Claims 1-16 are pending in the present application.

Drawing Objections

The Examiner maintained objections to the drawings, stating that "the claims 1-9 and 15-16 must be shown or the features canceled from the claims." Claims 1 and 15 recite four method steps, which are depicted in Figure 6. Claim 15 recites a computer readable medium, which is depicted in Figure 1. Accordingly, the claims are depicted in the drawings, and the drawing objection must be withdrawn.

35 U.S.C. § 112

The Examiner maintained the rejection of claim 11 under 35 U.S.C. § 112, stating that neither the specification nor the drawings indicate any flag whether to output a large data set. Paragraph 0019 states, "The synopsis container may additionally contain additional elements, such as a flag indicating whether or not the large data set is to be displayed." Paragraph 0021 states, "A flag, such as the READ_CHILDREN attribute 82 may be assigned a value indicating whether or not the accompanying large data set items are to be displayed." Paragraph 0022 states, "Because the READ_CHILDREN flag 82 was set to false, the table information 70 is not displayed in Figure 5." These statements provide sufficient support for the recitation of claim 11.

The Examiner stated, "Applicant is referring to the program code whereas the patents are not given for software and do not read or consider the program code or instructions." First, whether patents are issued for software or not is irrelevant to the sufficiency of disclosure of the specification and drawings. "The function of the written description requirement is to ensure that the inventor had possession of, as of the filing date of the application relied on, the specific subject matter later claimed by him or her; how the specification accomplishes this is not material." *In re Herschler*, 591 F.2d 693, 700-01 (CCPA 1979), MPEP § 2161.01 I (emphasis

added). "An adequate written description of the invention may be shown by **any** description of sufficient, relevant, identifying characteristics so long as a person skilled in the art would recognize that the inventor had possession of the claimed invention." *See, e.g., Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000), MPEP § 2163 III A 3 (a) (emphasis added). "An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997), MPEP § 2163.02. Nothing in the patent law precludes satisfaction of the written description requirement by reference to program code or instructions.

Second, none of the statements in the specification cited above are in "program code or instructions." Rather, they are English language prose descriptions of a flag indicating whether or not a large data set in a synopsis container is to be displayed. The written description as filed fully supports claim 11, and the § 112 objection must be withdrawn.

<u>35 U.S.C. § 101</u>

The Examiner maintained the rejection of claims 10-14 under 35 U.S.C. § 101 as being directed to a computer program *per se*, and hence nonstatutory subject matter. Claims 10-14 are amended herein to recite a computer readable medium including computer programs operative to cause a computer to perform the steps of generating various data structure components, and "outputting a markup language data structure synopsizing the large data set and operative to cause a computer having an accessibility system to output the synopsis of said large data set."

"'[F]unctional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component." MPEP § 2106.01. "Both types of 'descriptive material' [that is, both functional and nonfunctional] are nonstatutory when

claimed as descriptive material *per se*, 33 F.3d at 1360. When functional descriptive material is recorded on some <u>computer-readable medium</u>, it becomes structurally and functionally interrelated to the medium and <u>will be statutory</u> in most cases since use of technology permits the function of the descriptive material to be realized." *Id* (emphasis added). "**Only** when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory." MPEP § 2106.01 I (emphasis added). Claim 10 recites computer programs on a computer-readable medium, the computer programs operative to generate and output a specific data structure having specific operability. The claim thus recites statutory subject matter and the § 101 rejections must be withdrawn.

Another test for § 101 subject matter eligibility of inventions implemented in software is that a claim is statutory if a practical application of the claimed subject matter produces a useful, concrete, and tangible result. Claim 10 recites "outputting a markup language data structure synopsizing the large data set and operative to cause a computer having an accessibility system to output the synopsis of said large data set." The computer programs of claim 10 thus produce a useful, concrete, and tangible result: a data structure operative to cause a computer having an accessibility system to output the synopsis of a large data set, in lieu of or in addition to the large data set itself. As described in the specification, such a data structure and its operation in computers that recognize it – those having an accessibility system such as a screen reader – provides the useful result of summarizing a large data set for, *e.g.*, visually impaired persons.

Accordingly, the § 101 rejections of claims 10-14 must be withdrawn.

<div align="center">35 U.S.C. § 103</div>

The Examiner maintained the rejection of claims 1-8 and 10-15 under 35 U.S.C. § 103, stating, "Ramaswamy does teach, generating a synopsis of a large data [sic] as 'identifying a

predetermined number of outliers of interest in a large data set.'" As Applicant explained in the
Response of March 28, 2007, "outliers," as Ramaswamy defines the term, is the opposite of a
synopsis of a data set – it is a collection of <u>anomalous</u> data points. "[T]he ordinary and
customary meaning of a claim term is the meaning that the term would have to a person of
ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date
of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en
banc*). The ordinary and customary meaning of a term may be evidenced by a variety of
sources, including "the words of the claims themselves, the remainder of the specification, the
prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning
of technical terms, and the state of the art." Phillips v. AWH Corp., 415 F.3d at 1314.

Synopsis is defined at paragraph 0019, "The synopsis container additionally contains a
<u>summary or synopsis</u> of the large data set." A summary is "A presentation of the substance of a
body of material in a condensed form or by reducing it to its main points," (American Heritage,
via *answers.com*). Ramaswamy defines outliers as "data points in a data set that are <u>dissimilar</u>
from the remaining points in the set." col. 1, lines 11-12. A collection of <u>dissimilar points</u> is not
"the substance of a body of material . . . by reducing it to its <u>main points</u>." Main points and
dissimilar points are not synonymous; they are opposites. No one of skill in the art would equate
a synopsis or summary of a large data set to a collection of outlier points.

The Examiner stated, "a recitation of the intended use of the claimed invention must
result in a structural difference between the claimed invention and the prior art in order to
patentably distinguish the claimed invention from the prior art." Claim 1 recites, "generating a
synopsis of said large data set" and "formatting said synopsis of said large data set in a
synopsis container that includes said large data set and said synopsis of said large data set."
Nothing in claim 1 is an "intended use" of the claimed invention. The method steps of <u>generating</u>
a synopsis, and <u>formatting</u> the synopsis in a synopsis container that includes the data set and

the synopsis, are limitations of the claim which must be taught or suggested by the prior art to establish a *prima facie* case of obviousness. They are not intended uses of the claimed invention. Ramaswamy does not teach or suggest generating a synopsis of a large data set, or formatting the synopsis in a synopsis container that includes the large data set and the synopsis thereof. For at least this reason, the § 103 rejections must be withdrawn.

De Boor does not teach or suggest <u>any</u> claimed limitation for which it is cited, including any accessibility functionality such as a screen reader. The Examiner stated, "De Boor does teach the screen reader <u>as agreed by the applicant</u>." Applicant has agreed to no such thing. Applicant emphatically states that De Boor <u>fails</u> to teach or suggest a screen reader, or any other accessibility functionality. De Boor discloses HTML extensions that facilitate the display of web pages on the small screens of wireless communication devices (Abstract). De Boor is completely silent as to a screen reader or any other accessibility system. For at least this reason, the combination of Ramaswamy and De Boor fails to establish a *prima facie* case of obviousness, and the § 103 rejections must be withdrawn.
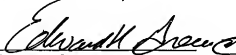
The Examiner stated, "the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious." This statement makes no sense. The Examiner has not identified any alleged advantage – presumably one or more claimed limitations – that would flow naturally from following any suggestion of De Boor. De Boor does not teach or suggest formatting a synopsis of a large data set along with the data set itself into a synopsis container data structure. De Boor does not teach or suggest any computer having an accessibility system such as a screen reader, and it does not teach or suggest transmitting the synopsis container to such a computer. For at least these additional reasons, the combination of Ramaswamy and De Boor fails to establish a *prima facie* case of obviousness, and the § 103 rejections must be withdrawn.

Conclusion

All pending claims, as amended herein, are fully supported by the written description, define patentable subject matter, and are patently nonobvious over the art of record.

Accordingly, prompt allowance of all pending claims is hereby respectfully requested.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

Dated: August 9, 2007

Edward H. Green, III
Registration No.: 42,604

1400 Crescent Green, Suite 300
Cary, NC 27518
Telephone: (919) 854-1844
Facsimile: (919) 854-2084